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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,140	04/23/2001	Nobuo Tsuchiya	35.C15319	1614
5514	7590	11/15/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			SINGH, DALZID E	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/839,140

Applicant(s)

TSUCHIYA, NOBUO

Examiner

Dalzid Singh

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 2-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Allowable Subject Matter***

1. The indicated allowability of claims 1-12 is withdrawn in view of the newly discovered reference(s) to Lacroix et al. Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8 and 9/1 are rejected under 35 U.S.C. 102(b) as being anticipated by Lacroix et al (US Patent No. 4,677,644).

Regarding claim 1, Lacroix et al show an optical signal receiver, shown in Fig. 1, comprising:

an opto-electric converter (2) for converting an optical signal transmitted from a remotely opposed transmitter into an electric signal (see col. 3, lines 53-56);

a reproduction circuit (4) for reproducing a data signal from an output of said opto-electric converter;

a fixed signal generation circuit (7) for generating a fixed signal (see col. 4, lines 12-32);

a switch (18) for selectively outputting either the data signal reproduced by said reproduction circuit or the fixed signal generated by said fixed signal generation circuit (see Fig. 2 and col. 4, lines 57-63); and

a control circuit for detecting an abnormal state of optical signal transmission and controlling said switch, said control circuit being adapted to output the fixed signal from said switch, when it detects the abnormal state while outputting the data signal from said switch (see col. 4, lines 3-11, col. 4, lines 57-63, col. 5, lines 18-29, col. 6, lines 52-68 to col. 7, lines 1-20).

Regarding claim 8, since the receiver receives optical light, therefore, it is inherent that there exist lenses for converging the optical signal to said opto-electric converter.

Regarding claim 9/1, as shown in Fig. 1, Lacroix et al show a transmitter for transmitting an optical signal; and an optical signal receiver, said optical signal receiver being remotely opposed to said transmitter and adapted to receive the optical signal transmitted from said transmitter (Fig. 1 shows transceiver for transmitting and receiving optical signal; the transmitter transmits optical signal to receiver remotely opposed to the transmitter and adapted to receive the optical signal transmitted from said transmitter).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacroix et al (US Patent No. 4,677,644) in view of Kawano (US Patent No. 5,436,750).

Regarding claim 10, as shown in Fig. 1, Lacroix et al show the transmitter comprises main signal (from regenerator) and an electro-optic converter for converting electrical signal into an optical signal and differ from the claimed invention in that Lacroix et al do not specifically disclose a main signal input section, an auxiliary signal generation circuit for generating an auxiliary signal to be used for detecting a DC component level of the optical signal and a multiplexer for multiplexing the main signal and the auxiliary signal. Kawano is cited to show such well known concept. In col. 1 line 45-50, Kawano teaches optical transmitter comprising main signal (data signal), auxiliary (supervisory) signal and multiplexer for multiplexing the signals. Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to multiplex auxiliary (supervisory) signal to main data signal of Lacroix et al. One of ordinary skill in the art would have been motivated to do such in order to provide fault detection capability.

Regarding claim 11, since the transmitter transmits optical signal, therefore it would have been obvious that the transmitter comprises lenses for sending out the optical signal transmitted from the electro-optic converter toward the optical signal receiver.

Regarding claim 12, in col. 4, lines 10-11, Lacroix et al disclose laser diode which is an electro-optic converter; further it would have been obvious that there exist laser drive circuit for driving said laser diode.

### ***Allowable Subject Matter***

6. Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoshida et al (US Patent No. 5,099,349) is cited to show optical transmission line system.

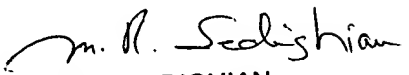
Kitamura et al (US Patent No. 5,130,837) is cited to show optical repeater having means for preventing malfunction due to the presence of noise.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DS  
November 8, 2005

  
**M. R. SEDIGHIAN**  
**PRIMARY EXAMINER**